

On the identity of the type species *Corinna rubripes* C. L. Koch with remarks on the taxonomy of the genus (Araneae, Corinnidae)

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On the identity of the type species *Corinna rubripes* C. L. Koch with remarks on the taxonomy of the genus (Araneae, Corinnidae). - The Neotropical species *Corinna rubripes* C. L. Koch, 1842 is redescribed and the female is described for the first time.

Key-words: *Corinna rubripes* - Corinnidae - Araneae - Neotropical - Taxonomy.

INTRODUCTION

For more than a century the spider genus *Corinna*, proposed by C. L. KOCH (1842), has served merely as a reservoir for species of Corinninae without obvious derived characters such as enlarged male chelicerae, sternal excavations or a recurved posterior eye row. In consequence, at the moment *Corinna* is clearly an artificial assemblage.

The first step toward making this genus monophyletic is to review the status of the type species, *C. rubripes* C. L. Koch, 1842, described from a single male from Bahia State, Brazil and last reviewed by KARSCH (1880), who first used the name Corinnidae. The present article is focused on this species, of which the male is redescribed and the female is described for the first time.

The study of a large sample of corinnines has so far suggested only one derived character shared by the group that includes *C. rubripes*: male palp with a sclerotized conductor, forming a groove and embracing the filiform embolus. This character is a transformation of the hyaline conductor occurring in almost all other corinnines and in representatives of many other families as well. This suggests that *Corinna* must be redefined to include only those corinnine spiders with a sclerotized conductor. More than half of the species currently placed in *Corinna* have hyaline conductors and must therefore be excluded from the genus.

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MATERIAL AND METHODS

The material examined belongs to the following collections: AMNH, American Museum of Natural History, New York (N. I. Platnick); CPDC, Centro de Pesquisas do Cacau - Ceplac, Itabuna (P. S. Terra); MACN, Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires (C. Scioscia); MCN, Museu de Ciências Naturais, Fundação Zoobotânica do Rio Grande do Sul, Porto Alegre (E. H. Buckup); MNRJ, Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro (A. T. da Costa); UFPB, Universidade Federal da Paraíba, João Pessoa (P. F. L. Duarte); ZMB, Zoologisches Museum, Berlin (M. Moritz). All measurements are in millimeters. Micrographs were obtained with scanning electron microscope Jeol JSM-5200 in MCN. The format of the description follows, with few modifications, BONALDO & BRESCOVIT (1994).

DESCRIPTION

Corinna rubripes C. L. Koch

(Figs 1-19)

Corinna rubripes C. L. Koch, 1842: 17, pl. 293, fig. 702 (male holotype ZMB 2134, from Bahia, Brazil, Gomez leg. examined); KARSCH 1880: 375, pl. 12, fig. 1; SIMON 1898: 198; PETRUNKEVITCH 1911: 469; 1928: 177; ROEWER 1954: 600; BONNET 1956: 1216; MORITZ & FISCHER 1988: 137.

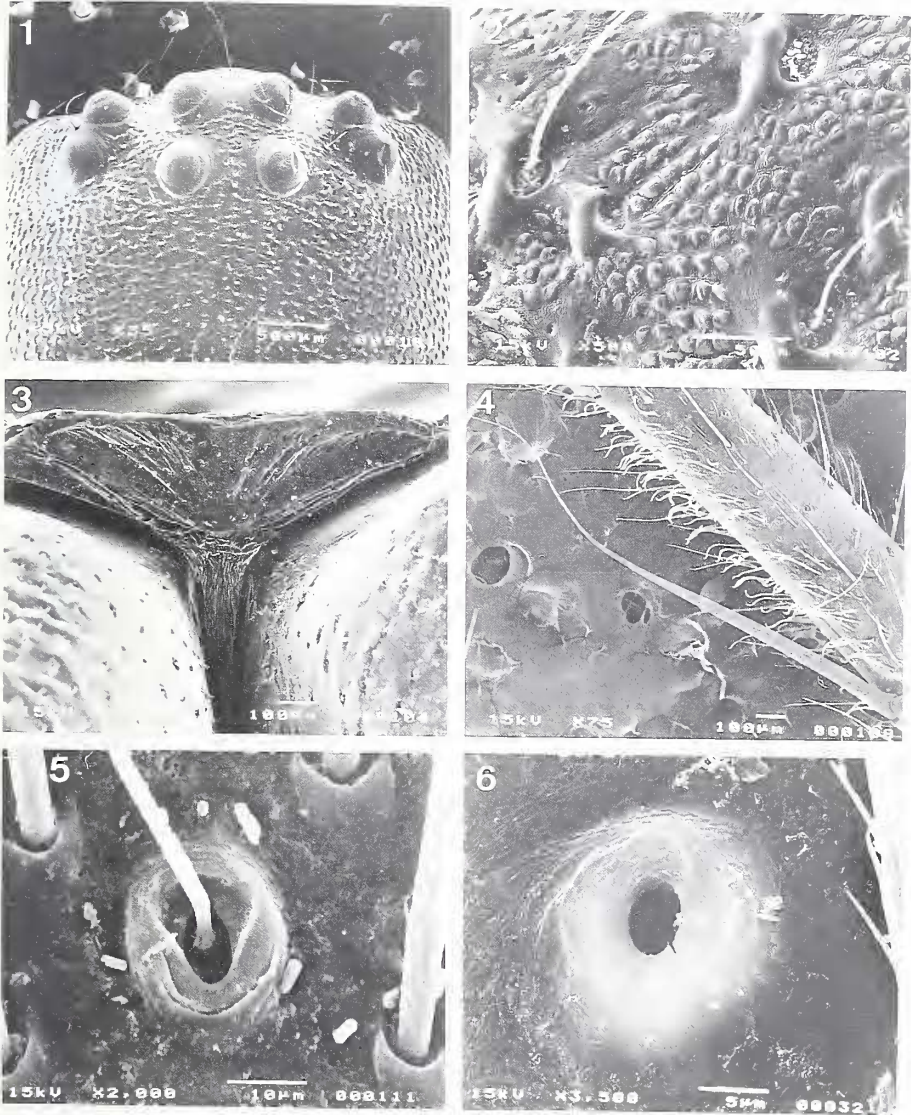
Sparassus rubripes; WALCKENAER, 1847: 561.

Note: MELLO-LEITÃO (1923) presented a key for females of Brazilian species of *Corinna* which includes *C. rubripes*. The characters used in this key indicate that his female was misidentified. The citation of *C. rubripes* from Bogota, Colombia by MELLO-LEITÃO (1941) (MNRJ 196, examined) is also based on a misidentification.

MATERIAL EXAMINED. BRITISH GUIANA, Canje Ikuruwa River (57° 50'W, 5° 70'N), 1 ♂, VIII-XII.1961, G. Bentley col. (AMNH); BRAZIL, Pernambuco: 1 ♀ (MACN); Tapera (Mata), 1 ♀, 19.VIII.1988, O. Lira col. (UFPB); Bahia: Uruçuca (Almada Farm), 1 ♂, 26.XI.1977, J. S. Santos col. (CPDC); Camacan (Matiapã Farm), 2 ♂, 1 ♀, 14.X.1978, J. S. Santos col. (CPDC, MCN 10681); 1 ♂, 16.X.1978, J. S. Santos col. (MCN 11315); Itamarajú, 1 ♂, (MNRJ); Pedra do Cavalo, 1 ♂, IV.1980, T. B. Nunes col. (IBSP 4938); Minas Gerais: Pedra Azul, 1 ♂, XII. 1970, F. M. Oliveira col. (AMNH).

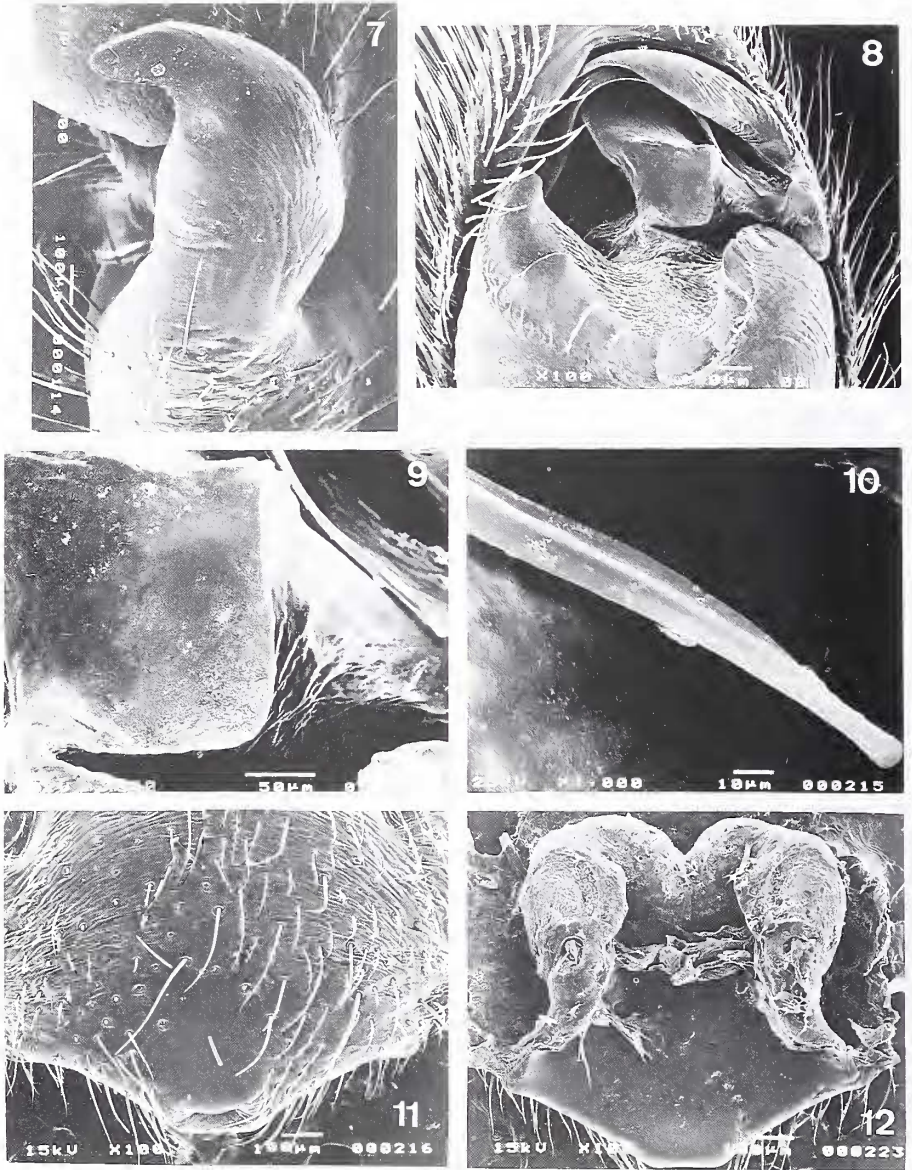
DISTRIBUTION: British Guiana and northeast Brazil.

DIAGNOSIS. *Corinna rubripes* is close to *C. nitens* (Keyserling) (see KEYSERLING 1891, figs. 30 a-c, for comparison), but may be distinguished by the rounded or pointed rather than obtuse tip of the retrolateral tibial apophysis and the presence of a quadrangular process on the base of the conductor in the male palp (Figs 7, 8, 16, 17). In females, the epigynal plate is less projected posteriorly, with copulatory opening close to the posterior margin and "T"-shaped copulatory duct visible ventrally (Figs 11, 18).



FIGS 1-6

Corinna rubripes C. L. Koch, male: 1, 2, carapace, dorsal view; 3, chylum, frontal view; 4, metatarsus I, lateral view; 5, trichobothrial base, dorsal view; 6, tarsal organ, dorsal view.



FIGS 7-12

Corinna ribripes C. L. Koch, male: 7, palpal tibia, retrolateral view; 8, apex of bulb, ventral view; 9, base of conductor, ventral view; 10, apex of embolus, ventral view. Female: epigynum, 11, ventral view; 12, dorsal view.

Male (Camacan, Bahia). Carapace and chelicerae dark reddish brown, endites and lip reddish brown, sternum dark orange, legs orange, abdomen gray.

Total length 8.70. Carapace high, with thin granulations (Figs. 1, 2, 13, 14), 4.55 long, 3.95 wide, 1.17 high. Clypeus 0.50 high. Chilum entire, sclerotized, with few hairs (Fig. 3). Anterior eye row 1.95 long, procurved in frontal view; posterior eye row 2.15 long, procurved in dorsal view. Eye diameters and interdistances: AME 0.45, ALE 0.30, PME 0.27, PLE 0.27; AME-AME 0.25, AME-ALE 0.20, PME-PME 0.30, PME-PLE 0.55, ALE-PLE 0.12. MOQ length 0.80, front width 0.95, back width 0.87. Chelicerae geniculate, 2.45 long, with 3 promarginal and 4 retromarginal teeth. Sternum 2.45 long, 2.15 wide, strongly rebordered anteriorly (Fig. 15). Abdomen 4.05 long, 2.50 wide, with elongated dorsal scutum (Fig. 13); ventral scutum absent.

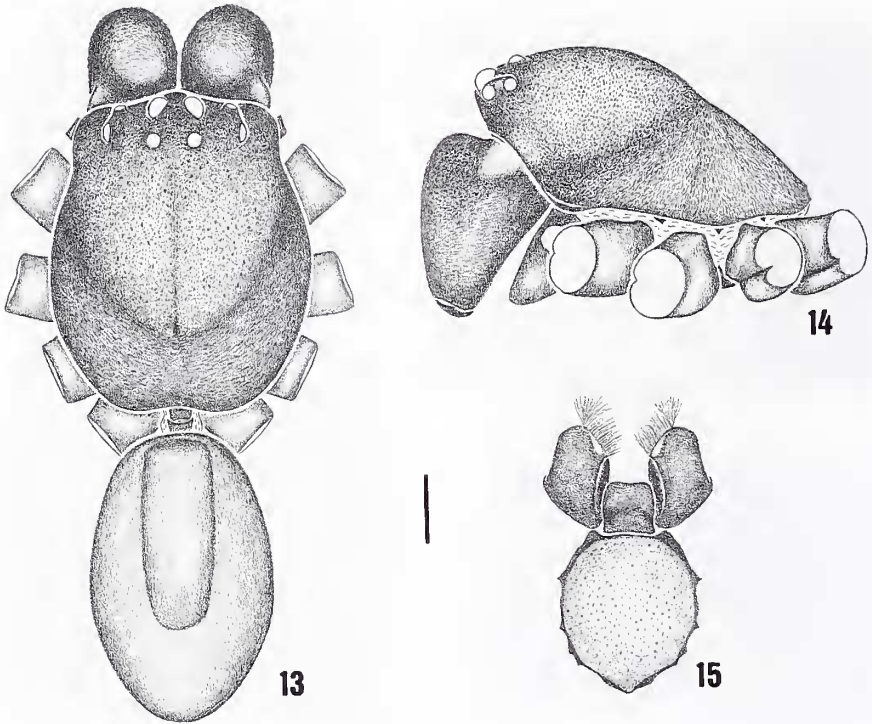
Leg measurements: I - femur 4.25 / patella 1.90 / tibia 3.75 / metatarsus 3.30 / tarsus 1.75 / total 14.95. II - 3.85 / 1.70 / 3.10 / 3.00 / 1.60 / 13.25. III - 3.25 / 1.55 / 2.35 / 2.90 / 1.35 / 11.40. IV - 4.15 / 1.70 / 3.60 / 4.05 / 1.50 / 15.00. Leg spination: I - femur d1-1, p0-0-1, r0, v0; tibia d0, p0, r0, v2-2-2-2; metatarsus d0, p0, r0, v2-2. II - femur d1-1, p0-0-1, r0, v0; tibia d0, p0-0-1, r0, v2-1r-2-2; metatarsus d0, p0, r0, v2-2. III - femur d1-1-1, p0-1-2, r0-1-1, v0; tibia d0, p0-1-0, r0-1-1, v2-2; metatarsus d0, p1-1-0, r1-1-0, v2-0-1. IV - femur d1-1-1, p0-0-1, r0-0-1, v0; tibia d0, p0, r0-1-1; v2-2; metatarsus d0, p0-1-0, r1-1-0, v2-2-1. Tibiae and metatarsi I and II with long, thin, ventral paired spines (Fig. 4). Trichobothrial bases with elongated ridge, traversing enlarged plate (Fig. 5). Tarsal organ distal, capsulate, with oval opening (Fig. 6).

Palp: femur with two stout dorsal apical spines; patella unmodified; retrolateral tibial apophysis large, strong, entire, medially expanded, with small projection on pro-lateral surface, tip curved ventrally; tegulum with wide ventral coiled duct and large prolateral extension projected over bases of embolus; conductor large, sclerotized, with basal quadrangular projection and apical margin folded, forming groove embracing median part of embolus. Filiform embolus, strongly curved retrolaterally, with distal carina (Fig. 7-10, 16, 17).

Female (Camacan, Bahia). Coloration as in male.

Total length 9.20. Carapace as in male, 5.05 long, 4.00 wide, 2.75 high. Clypeus 0.47 high. Chilum as in male. Anterior eye row 1.97 long, posterior eye row 2.32 long. Eye diameters and interdistances: AME 0.37, ALE 0.30, PME 0.30, PLE 0.30; AME-AME 0.25, AME-ALE 0.30, PME-PME 0.35, PME-PLE 0.60, ALE-PLE 0.10. MOQ length 0.65, front width 0.90, back width 0.90. Chelicerae strongly geniculated, 2.45 long, teeth as in male. Sternum 2.45 long, 2.10 wide, strongly rebordered anteriorly. Abdomen 4.30 long, 3.15 wide; dorsal scutum a small circular anterior mark; ventral scutum absent.

Leg measurements: I - femur 4.00 / patella 1.80 / tibia 3.40 / metatarsus 3.00 / tarsus 1.65 / total 13.85. II - 3.70 / 1.75 / 2.90 / 2.95 / 1.50 / 12.80. III - 3.10 / 1.55 / 2.25 / 2.80 / 1.30 / 11.00. IV - 4.05 / 1.70 / 3.45 / 3.90 / 1.40 / 14.55. Leg spination: I - femur d1-1, p0-0-1, r0, v0; tibia d0, p0, r0, v2-2-2-2; metatarsus d0, p0, r0, v2-2. II - femur d1-1, p0-0-1, r0, v0; tibia d0, p0, r0, v1r-1p-2-2; metatarsus d0, p0, r0, v2-2. III - femur d1-1-1, p0-1-1, r0-1-1, v0; tibia d0, p1-0, r1-1, v2-2-0; metatarsus d0, p0-1-0, r1-1-0, v2-2-1. IV - femur d1-1-1, p0, r0-0-1, v0; tibia d0, p0,



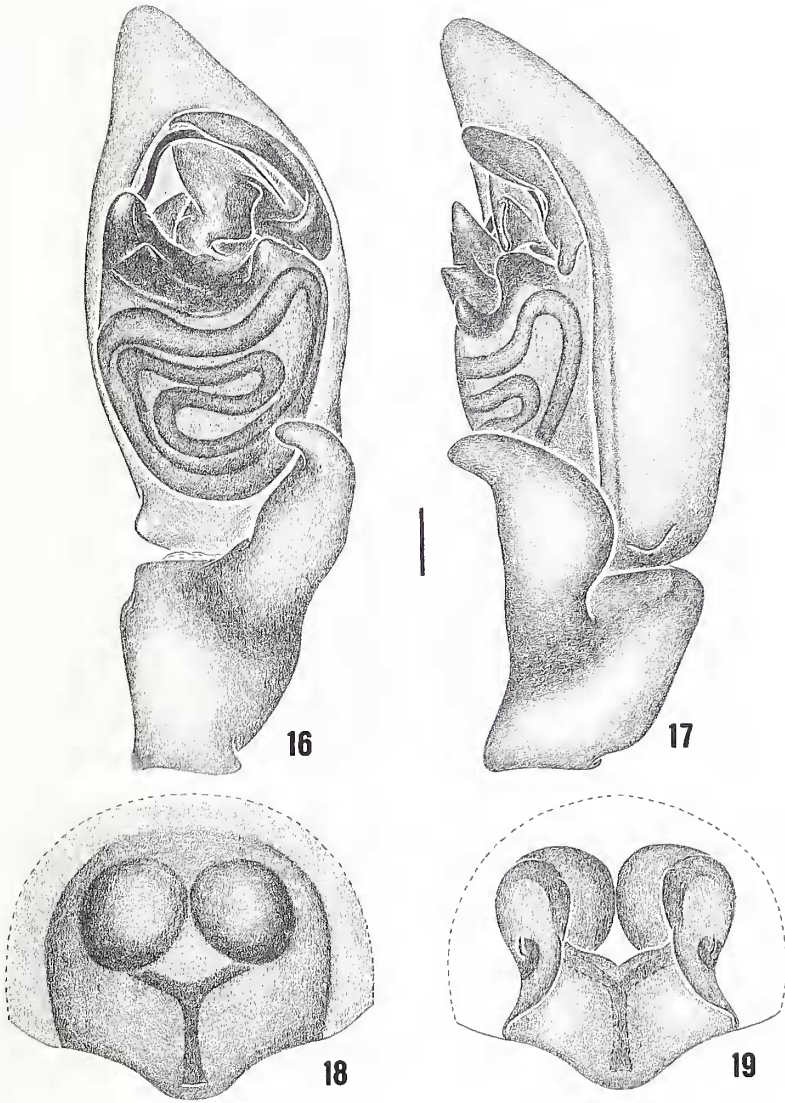
Figs 13-15

Corinna rubripes C. L. Koch, male: 13, body, dorsal view; 14, cephalothorax, lateral view; 15, sternum, lip and endites, ventral view. Scale line: 1 mm.

r0-1-1; v2-2-0; metatarsus d0, p0-1-0, r1-1-0, v2-2-1. Ventral paired spines on tibiae and metatarsi I and II as in male.

Epigynum: composed of concave smooth plate, slightly projected posteriorly, with single median copulatory opening, close to posterior margin; "T"-shaped copulatory duct and rounded head of spermathecae visible ventrally. Internally with posterior plate folded laterally; spermathecae fused to lateral folds of posterior plate; fertilization ducts small; head of spermathecae large, porose (Figs.11,12,18,19).

Variation. 8 males: total length 8.10 - 9.80; carapace 4.10 - 4.90; femur I 4.00 - 4.70; 3 females: total length 8.60 - 12.00; carapace 4.40 - 5.40; femur I 4.10 - 4.50. Some specimens have black carapace and chelicerae and reddish legs. The male from Minas Gerais, Brazil has the projection on the prolateral surface of retrolateral tibial apophysis larger and pointed; the tip of tibial retrolateral apophysis in specimens from Bahia, Brazil varies from rounded to pointed. Some females have the heads of spermathecae superposed.



FIGS 16-19

Corinna rubripes C. L. Koch, male: palp, 16, ventral view; 17, retrolateral view. Female: epigynum, 18, ventral view; 19, dorsal view. Scale line: 0.25mm.

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